



## P SERIES

### RF WIDEBAND TRANSFORMER

**MIL-PRF-27**

#### ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Dielectric Withstanding Voltage:** 300 V<sub>AC</sub>
- **Different electrical values available upon request**
- **Power Rating:** 250 mW
- **Frequency Response:** Up to 350 MHz

#### FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-PRF-27 (MIL-T-55631)** specifications
- **Low thermal expansion, Transfer Molded Package**
- **Terminations:** Tin-lead, Gold, RoHS
- Other termination finishes available
- **Welded Internal Connections**
- **Moisture, Shock and Immersion Resistant**
- **Resistance to Soldering Heat:** 265°C for 10 secs

#### APPLICATIONS

- Wideband Transformers
- RF Transformers

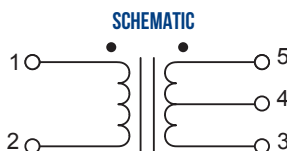
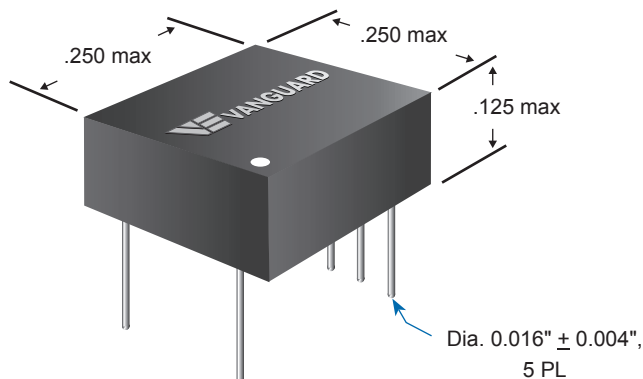
#### CUSTOM DESIGNS & MODIFICATIONS:

Other electrical configurations and performance characteristics are available in various sizes and package types

| Bandwidth (MHz) | Max Insertion Loss @ 50MHz | Impedance Ratio |
|-----------------|----------------------------|-----------------|
| 0.5 to 390      | 1 to 1.7                   | 1:1 to 1:16     |

MARKINGS: LASER OR INK  
ALL DIMENSIONS: INCHES

SMT AND GULLWING  
PACKAGES ALSO AVAILABLE

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## DATA TABLE

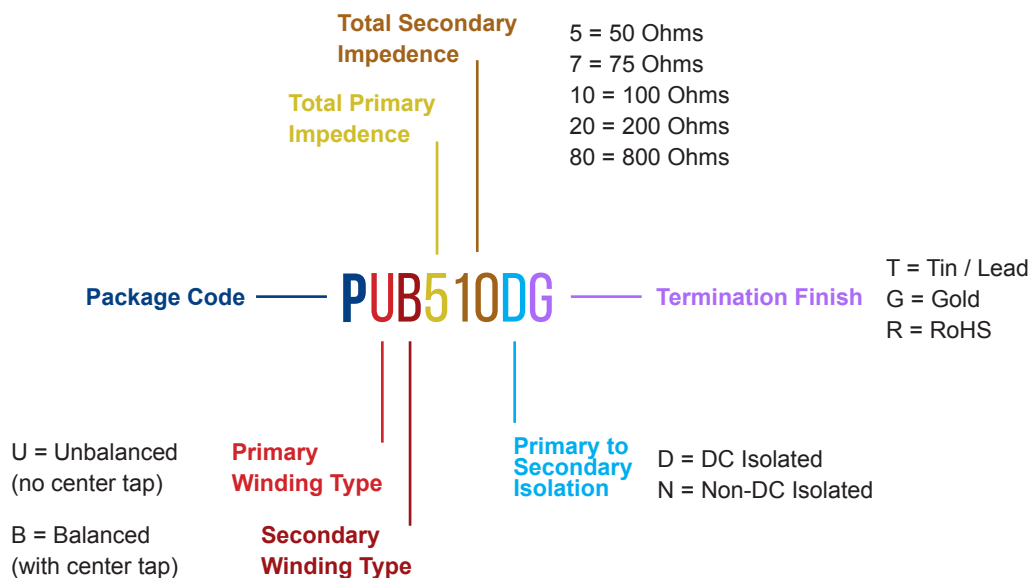
| Vanguard<br>P/N<br>P Series | Impedance<br>Ratio<br>Pri : Sec | Primary<br>Center<br>Tap** | Secondary<br>Center<br>Tap | Insertion Loss<br>@50 MHz<br>max ref<br>(dB) | VSWR<br>@50 MHz<br>max ref | Bandwidth min (MHz) |                |
|-----------------------------|---------------------------------|----------------------------|----------------------------|----------------------------------------------|----------------------------|---------------------|----------------|
|                             |                                 |                            |                            |                                              |                            | 0.5 dB<br>(Ripple)  | 3 dB<br>Points |
| PUB55D                      | 1 : 1                           | No                         | Yes                        | 1                                            | 1.3                        | 5.0 - 130           | 1.0 - 390      |
| PUB57D                      | 1 : 1.5                         | No                         | Yes                        | 1.5                                          | 1.6                        | 6.0 - 90            | 3.0 - 200      |
| PUB510D                     | 1 : 2                           | No                         | Yes                        | 1.1                                          | 1.36                       | 2.0 - 100           | 0.5 - 230      |
| PUB520D                     | 1 : 4                           | No                         | Yes                        | 1                                            | 1.2                        | 2.0 - 150           | 0.8 - 300      |
| PUB580D                     | 1 : 16                          | No                         | Yes                        | 1.2*                                         | 1.7*                       | 12 - 35             | 2.0 - 140      |
| PUU55D                      | 1 : 1                           | No                         | No                         | 1                                            | 1.35                       | 7.0 - 100           | 1.2 - 350      |
| PUU57D                      | 1 : 1.5                         | No                         | No                         | 1.7                                          | 1.65                       | 8.0 - 70            | 4.0 - 170      |
| PUU510D                     | 1 : 2                           | No                         | No                         | 1.3                                          | 1.4                        | 3.0 - 85            | 0.9 - 200      |
| PUU520                      | 1 : 4                           | No                         | No                         | 1.1                                          | 1.25                       | 4.0 - 130           | 1.0 - 250      |
| PUU580D                     | 1 : 16                          | No                         | No                         | 1.5*                                         | 1.95*                      | 12 - 25             | 2.5 - 110      |

Inductance measured at 10 kHz, 0.1 V<sub>RMS</sub> \*Measured at 15 MHz

\*\*To design with primary center tap - contact factory.

FOR ADDITIONAL CATALOG VALUES, PLEASE SEE THE BELOW PART NUMBERING SYSTEM OR CONTACT THE FACTORY:

## PART NUMBER



## CUSTOM DESIGNS &amp; MODIFICATIONS:

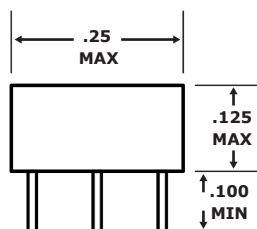
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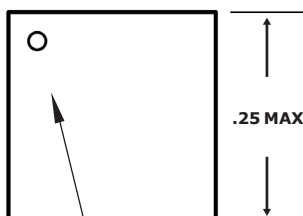




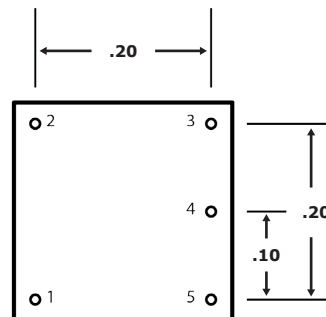
## P SERIES



SIDE VIEW



TOP VIEW



BOTTOM VIEW

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